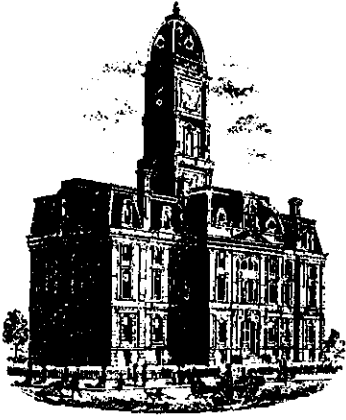


Drain: OAK PARK DRAIN **Drain #:** 272
Improvement/Arm: OAK PARK - SECTION 1
Operator: JDH **Date:** 2-17-04
Drain Classification: Urban/Rural **Year Installed:** 1994

GIS Drain Input Checklist

- Pull Source Documents for Scanning JDH 2-17
- Digitize & Attribute Tile Drains N/A
- Digitize & Attribute Storm Drains JDH 2-17
- Digitize & Attribute SSD JDH 2-17
- Digitize & Attribute Open Ditch JDH 2-17
- Stamp Plans JDH 2-17
- Sum drain lengths & Validate JDH 2-17
- Enter Improvements into Posse JDH 2-17
- Enter Drain Age into Posse July 3-2
- Sum drain length for Watershed in Posse July 3-2
- Check Database entries for errors JDH 2-17



SURVEYOR'S OFFICE

Hamilton County

Kenton C. Ward, Surveyor

Suite 146

776-8495

One Hamilton County Square

Noblesville, Indiana 46060-2230

November 3, 1994

TO: Hamilton County Drainage Board

RE: Oak Park Drain-Section 1 Arm

Attached is a petition, non-enforcement request, plans, calculation, quantity summary and assessment roll for the Section 1 Arm of the Oak Park Drain. I have reviewed the submittals and petition and have found each to be in proper form.

I have made a personal inspection of the land described in the petition. Upon doing so, I believe that the drain is practicable; will improve the public health; benefit a public highway and be of public utility; and that the costs, damages and expenses of the proposed drain will probably be less than the benefits accruing to the owners of land likely to be benefited.

The drain will consist of the following:

6"	SSD	3988ft	15"	RCP	740ft
Open Ditch		2800ft	18"	RCP	28ft
10"	CMP	20ft	21"	RCP	125ft
12"	RCP	106ft	24"	RCP	40ft

The total length of the drain will be 7,847 feet.

The retention pond (area) located in the open ditch in the rear of Lots 21 and 22 and on Tract 10-07-00-00-011.000 is to be considered part of the regulated drain. The inlet and outlet will be maintained as part of the regulated drain, along with the bern. The Board will also retain jurisdiction for ensuring the storage volume for which the lake was designed will be retained. Thereby, allowing no fill or easement encroachments.

The open ditch portion listed above includes that beginning at the South side of 161st Street, at the existing 15"x30" CMP, North of Lot 12 and running South across Lots 12, 13, 14, 15, 20, 21 and 22 and Tract 10-07-00-00-011.000. Also included is the open ditch from STR 101, running East along the South side of 161st Street to its intersection with the main portion described above South of the 15"X30" CMP under 161st Street and between STR 105 to the main ditch along the South line of Lot 12.

The subsurface drains (SSD) to be part of the regulated drain are those located under the curbs and those main lines between lots or in rear yards. Only the main SSD lines which are located within the easement/right of way are to be maintained as regulated drain. Laterals for individual lots will not be considered part of the regulated drain. The portion of the SSD which will be regulated, other than those under curbs are as follows:

Between Lots 16 and 19; 17 and 19; and outletting into the

open ditch on Tract 10-07-00-00-011.000.

I have reviewed the plans and believe the drain will benefit each lot equally. Therefore, I recommend each lot be assessed equally. I also believe that no damages will result to landowners by the construction of this drain. I recommend a maintenance assessment of \$35.00 per lot, \$5.00 per acre for roadways and tracts, with a \$35.00 minimum. With this assessment the total annual assessment for this drain/this section will be \$

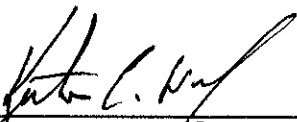
Parcels assessed for this drain may be assessed for the Mary E. Wilson, Wheeler & Beals or Cool Creek, or Vestal, Mary Cox or Kirkendall Creek Drains at sometime in the future. I recommend that when the Mary E. Wilson Drain is reconstructed, that it be extend North to this drain at the Southwest corner of Lot 22, Oak Park, Section 1.

I believe this proposed drain meets the requirements for Urban Drain Classification as set out in IC 36-9-27-67 to 69. Therefore, this drain shall be designated as an Urban Drain.

I recommend that upon approval of the above proposed drain that the Board also approve the attached non-enforcement request. This request is for the reduction of the regulated drain easement to those easement widths as shown on the secondary plat for Oak

Park Drain-Section 1 as recorded in the office of the Hamilton
County Recorder.

I recommend the Board set a hearing for this proposed drain
for December 1994.



Kenton C. Ward
Hamilton County Surveyor
KCW/no



AMWEST SURETY INSURANCE COMPANY

WOODLAND HILLS, CALIFORNIA

BOND NO. 022002938

PREMIUM \$794.00
Premium based on final contract price.

PERFORMANCE BOND

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

ESTRIDGE DEVELOPMENT COMPANY, INC.

148 WEST CARMEL DRIVE

CARMEL, IN 46032

OWNER (Name and Address):

HAMILTON COUNTY BOARD OF COMMISSIONERS

COUNTY COURT HOUSE

NOBLESVILLE, IN 46060

SURETY (Name and Principal Place of Business):

AMWEST SURETY INSURANCE COMPANY

8910 PURDUE ROAD, STE 305

INDIANAPOLIS, IN 46268

CONSTRUCTION CONTRACT

Date: _____ Contract Number: _____

Amount: THIRTY NINE THOUSAND SEVEN HUNDRED TWENTY AND NO/100*** Dollars (\$39,720.00)

Description (Name and Location): SUBDIVISION BOND: OAK PARK DEVELOPMENT, STORM SEWERS
WESTFIELD, INDIANA

BOND

Amount: THIRTY NINE THOUSAND SEVEN HUNDRED TWENTY AND NO/100*** Dollars (\$39,720.00)

Signed, sealed and dated this 13TH DAY OF JANUARY, 1994

ESTRIDGE DEVELOPMENT COMPANY, INC.

Principal

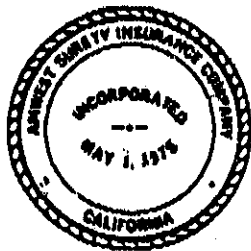
By: Kenneth R. Brown
Signature of Principal

AMWEST SURETY INSURANCE COMPANY

SHARON E. CALVIN

Attorney-in-Fact

By: Sharon E. Calvin
Signature of Attorney-in-Fact





AMWEST SURETY INSURANCE COMPANY

Performance Bond

BOND NO.

1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.
3. If there is no Owner Default, the Surety's obligation under this Bond shall arise after:
 - 3.1 The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default; and
 - 3.2 The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and
 - 3.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.
4. After the Owner has declared Contractor in default and has satisfied the conditions of Paragraph 3, and the Surety has conducted its own prompt and reasonable investigation as to whether or not the Contractor's default has actually occurred, the Surety may at its own option elect one or more of the following actions:
 - 4.1 Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or
 - 4.2 Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or
 - 4.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the Contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 5 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or
 - 4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
 - .1 After investigation, determine the amount for which it may be liable to the Owner and as soon as practicable after the amount is determined, tender payment therefor to the Owner; or
 - .2 Deny liability in whole or in part and notify the Owner citing reasons therefore.
5. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.
6. After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:
 - 6.1 The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract; and
 - 6.2 Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
7. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators or successors.
8. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.
9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within six months after Contractor Default or within six months after the Contractor ceased working or within six months after the Surety refused or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
10. Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.
11. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or other legal requirement shall be deemed incorporated herein.

12. DEFINITIONS

- 12.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, or reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
- 12.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.
- 12.3 Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.
- 12.4 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms hereof.

This copy printed from the Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste. 188, Noblesville, In 46060

LIMITED POWER OF ATTORNEY

Amwest Surety Insurance Company

NOT VALID FOR BONDS
EXECUTED ON OR AFTER
11-19-94

POWER NUMBER
0294575 - 55

READ CAREFULLY - To be used only in conjunction with the bond specified herein

This document is printed on multi-colored security paper with black and red ink, with border in blue ink and bears the raised seal of Amwest Surety Insurance Company (the "Company"). Only unaltered originals of this Power of Attorney are valid. This Power of Attorney is valid solely in connection with the execution and delivery of the bond noted below and may not be used in conjunction with any other power of attorney. No representations or warranties regarding this Power of Attorney may be made by any person. This Power of Attorney is governed by the laws of the State of California. Any power of attorney used in connection with any bond issued by the Company must be on this form and no other form shall have force or effect.

KNOW ALL MEN BY THESE PRESENTS, that Amwest Surety Insurance Company, a California corporation (the "Company"), does hereby make, constitute and appoint:
SHARON E. CALVIN
AS AN EMPLOYEE OF AMWEST SURETY INSURANCE COMPANY

its true and lawful Attorney-in-Fact, with limited power and authority for and on behalf of the Company as surety to execute, deliver and affix the seal of the Company thereto if a seal is required on bonds, undertakings, recognizances or other written obligations in the nature thereof as follows:

- Bid Bonds up to **\$\$\$1,000,000.00**
- Contract (Performance & Payment), Court, Subdivision **\$\$\$1,000,000.00**
- License & Permit Bonds up to **\$\$\$1,000,000.00**
- Miscellaneous Bonds up to **\$\$\$1,000,000.00**
- Small Business Administration Guaranteed Bonds up to **\$\$\$1,250,000.00**

and to bind the Company thereby. This appointment is made under and by authority of the By-Laws of the Company, which are now in full force and effect.

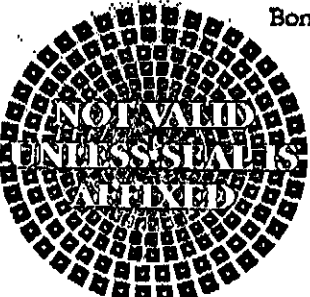
CERTIFICATE

I, the undersigned secretary of Amwest Surety Insurance Company, a California corporation, DO HEREBY CERTIFY that this Power of Attorney remains in full force and effect and has not been revoked and furthermore, that the resolutions of the Board of Directors set forth on the reverse, and that the relevant provisions of the By-Laws of the Company, are now in full force and effect.

Bond number 022002938 Signed and sealed this 13TH day of JANUARY 19 94

Karen G. Cohen
Karen G. Cohen, Secretary

00 00294575 - 55
T



6320 Camoga Avenue Post Office Box 4500 Woodland Hills, CA 91365 (500) 411-8118

Resolutions of the Board of Directors

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following resolutions adopted by the Board of Directors of Amwest Surety Insurance Company at a meeting duly held on December 15, 1975:

RESOLVED, that the President or any Vice President, in conjunction with the Secretary or any Assistant Secretary, may appoint attorneys-in-fact or agents with authority as defined or limited in the instrument evidencing the appointment in each case, for and on behalf of the Company, to execute and deliver and affix the seal of the Company to bonds, undertakings, recognizances, and suretyship obligations of all kinds; and said officers may remove any such attorney-in-fact or agent and revoke any power of attorney previously granted to such person.

RESOLVED FURTHER, that any bond, undertaking, recognizance, or suretyship obligation shall be valid and binding upon the Company:

- (i) when signed by the President or any Vice President and attested and sealed (if a seal be required) by my Secretary or Assistant Secretary; or
- (ii) when signed by the President or any Vice President or Secretary or Assistant Secretary, and countersigned and sealed (if a seal be required) by a duly authorized attorney-in-fact or agent; or
- (iii) when duly executed and sealed (if a seal be required) by one or more attorneys-in-fact or agents pursuant to and within the limits of the authority evidenced by the power of attorney issued by the Company to such person or persons.

RESOLVED FURTHER, that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any power of attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company; and such signature and seal when so used shall have the same force and effect as though manually affixed.

IN WITNESS WHEREOF, Amwest Surety Insurance Company has caused these presents to be signed by its proper officers, and its corporate seal to be hereunto affixed this 1st day of January, 1993.



John E. Savage
John E. Savage, President

Karen G. Cohen
Karen G. Cohen, Secretary

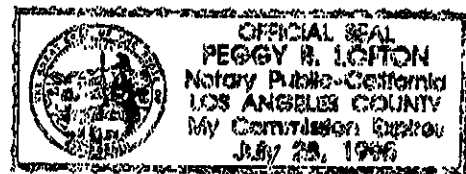
State of California
County of Los Angeles

On January 1, 1993 before me, Peggy B. Lofton Notary Public, personally appeared John E. Savage and Karen G. Cohen, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me all that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument

WITNESS my hand and official seal.

Signature *Peggy B. Lofton*
Peggy B. Lofton, Notary Public

(Seal)



Restrictions and Endorsements

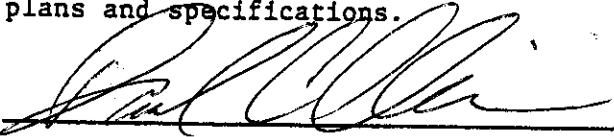
CERTIFICATE OF COMPLETION AND COMPLIANCE

TO: HAMILTON COUNTY SURVEYOR

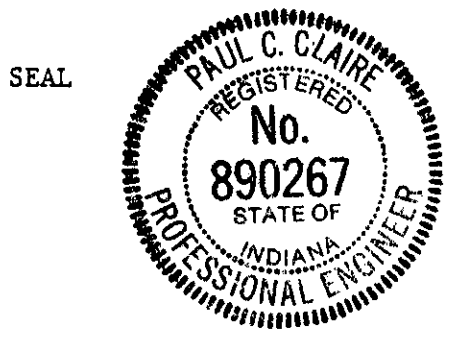
RE: OAK PARK SECTION 1

I hereby certify that:

- 1.) I am a Registered Engineer in the State of Indiana,
- 2.) I am familiar with the plans and specifications for the above referenced subdivision,
- 3.) I have personally observed and supervised the completion of the Drainage Facilities for the above referenced subdivision, and
- 4.) To the best of my knowledge, information and belief, the Drainage Facilities within the subdivision has been installed and completed in conformity with all plans and specifications.

Signature:  Date: 12/16/94
Type or Printed Name: Paul C. Claire P.E.
Business Address: Schneider Engineering Corp.
3020 N. Post Rd., Indpls., IN 46226
Telephone: (317) 898-8282

INDIANA REGISTRATION NUMBER
890267





SURVEYOR'S OFFICE
Hamilton County

Kenton C. Ward, Surveyor

Phone (317) 776-8495

Fax (317) 776-9628

Suite 146

One Hamilton County Square

Noblesville, Indiana 46060-2230

July 24, 1996

To: Hamilton County Drainage Board

Re: Oak Park Drain-Section 1

Attached are as-builts, certificate of completion & compliance, and other information for Oak Park Section 1. An inspection of the drainage facilities for this section has been made and the facilities were found to be complete and acceptable.

During construction, changes were made to the drain which will alter the plans submitted with my report for this drain dated November 3, 1994. The changes are as follows:

Structure 113 to 114 consists of 24' RCP which lengthened from 40' feet to 45' feet.

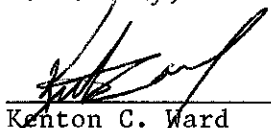
The length of the drain due to the changes described above is 7852 feet.

The non-enforcement was approved by the Board at its meeting on December 27, 1994.

The bond or letter of credit from Amwest Surety Insurance Co., number 022002938, dated January 13, 1994, in the amount of \$39,720.00, has been recommended for release in a letter to the Commissioners dated December 28, 1994.

I recommend the Board approve the drains construction as complete and acceptable.

Sincerely,



Kenton C. Ward
Hamilton County Surveyor

KCW/ndw

THE OAKS

(CONSTRUCTION PLANS)

WESTFIELD, INDIANA HAMILTON COUNTY, INDIANA

DEVELOPER:

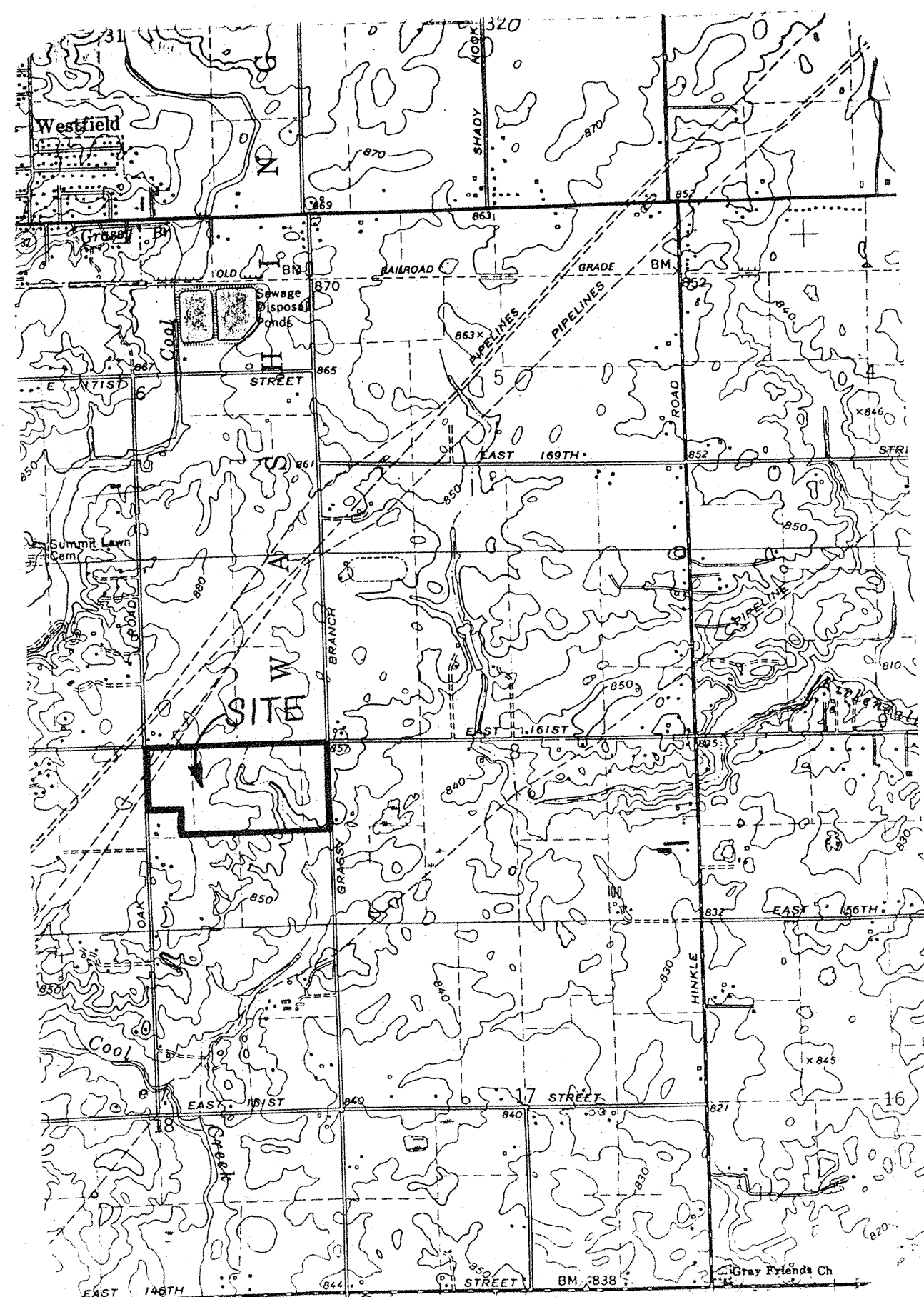
ESTRIDGE DEVELOPMENT COMPANY

1041 WEST MAIN STREET
CARMEL, INDIANA 46032
(317) 582-2456

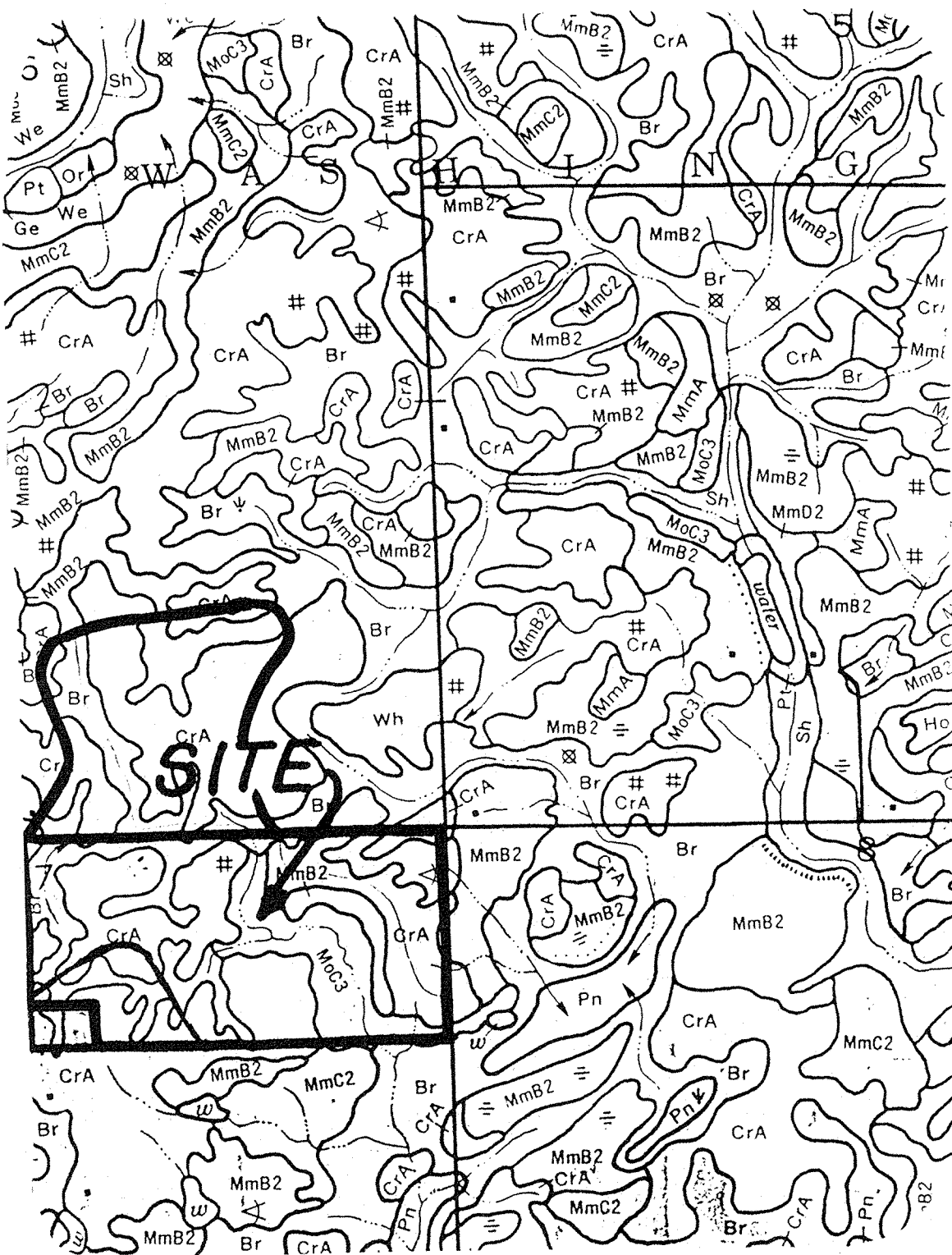
ENGINEER:

SCHNEIDER ENGINEERING CORP.

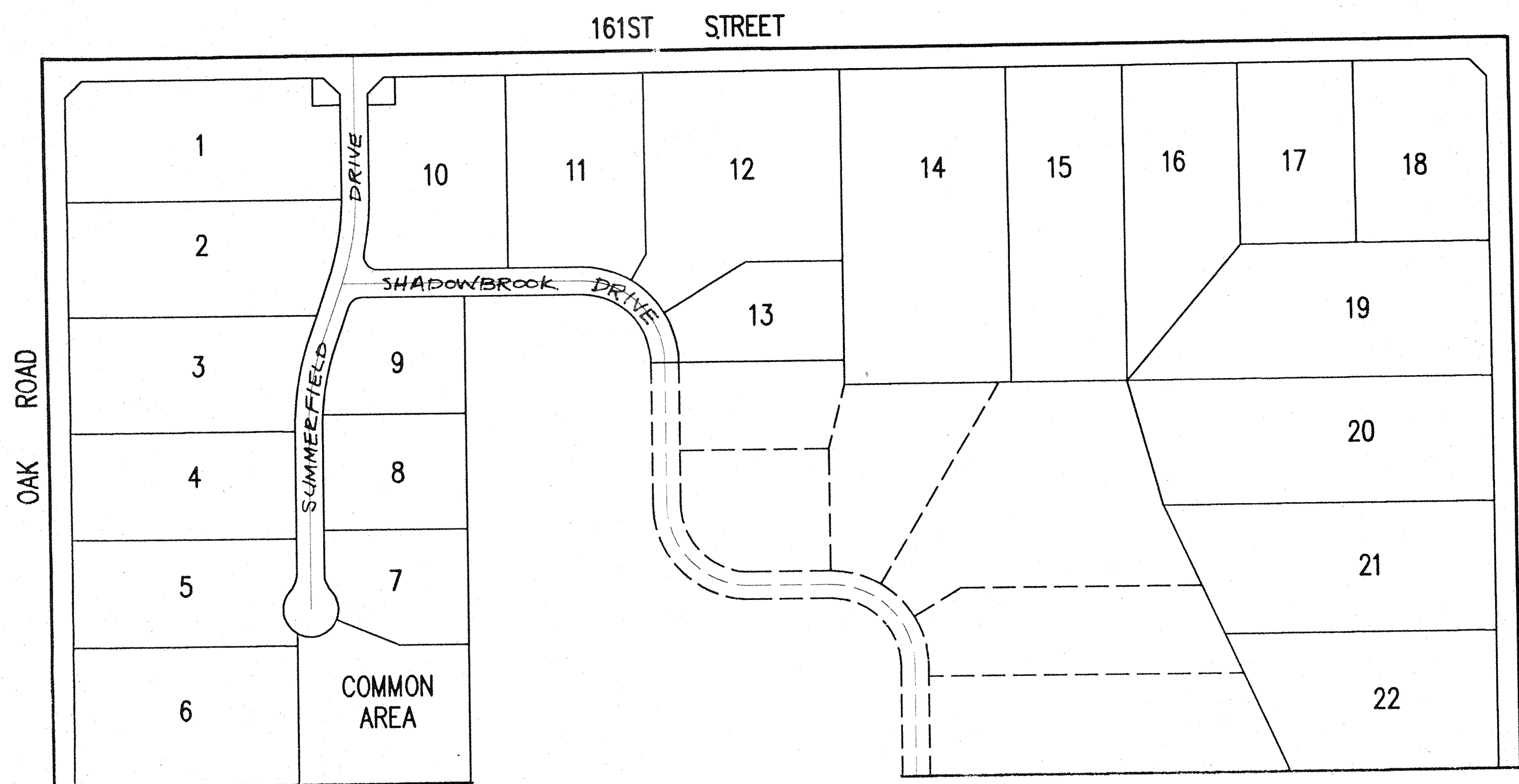
3020 NORTH POST ROAD
INDIANAPOLIS, INDIANA 46226
(317) 898-8282 FAX (317) 899-8010



AREA MAP
NOT TO SCALE



SOILS MAP
NOT TO SCALE



SITE MAP
SCALE: 1"=200'

INDEX	
SHEET No.	DESCRIPTION
S-1	TITLE SHEET
S-2	TOPOGRAPHY
S-3-S-4	DEVELOPMENT PLAN
S-5-S-6	EROSION CONTROL PLAN
S-7	ENTRANCE PLAN
S-8-S-9	STREET PLAN
S-10	SANITARY SEWER PLAN
S-11-S-12	FORCE MAIN PROFILE
S-13	STORM SEWER PLAN
S-14	GENERAL DETAILS
S-15	SANITARY SEWER DETAILS
S-16	SANITARY SEWER SPECIFICATIONS
S-17	SPECIFICATIONS

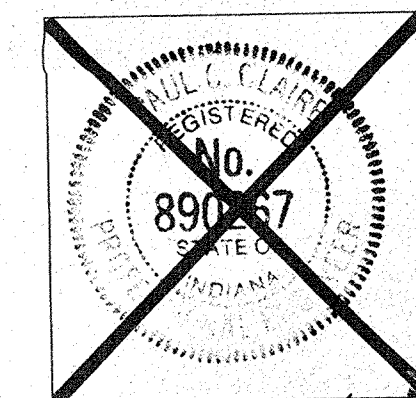


This information was gathered for input into the Hamilton County Geographical Information System. This document is considered an official record of the GIS.
Entry Date: 7-17-04
Entered by: JPH



Schneider Engineering Corporation
PROFESSIONAL ENGINEERS—LAND SURVEYORS—LAND PLANNERS—GEOLOGISTS
INDIANAPOLIS, INDIANA
3020 NORTH POST ROAD
INDIANAPOLIS, INDIANA 46226-6518
Telephone (317) 898-8282 FAX (317) 899-8010

AVON
6845 EAST U.S. 36, SUITE 500
DANVILLE, INDIANA 46122
Telephone (317) 272-0108 FAX (317) 272-0412

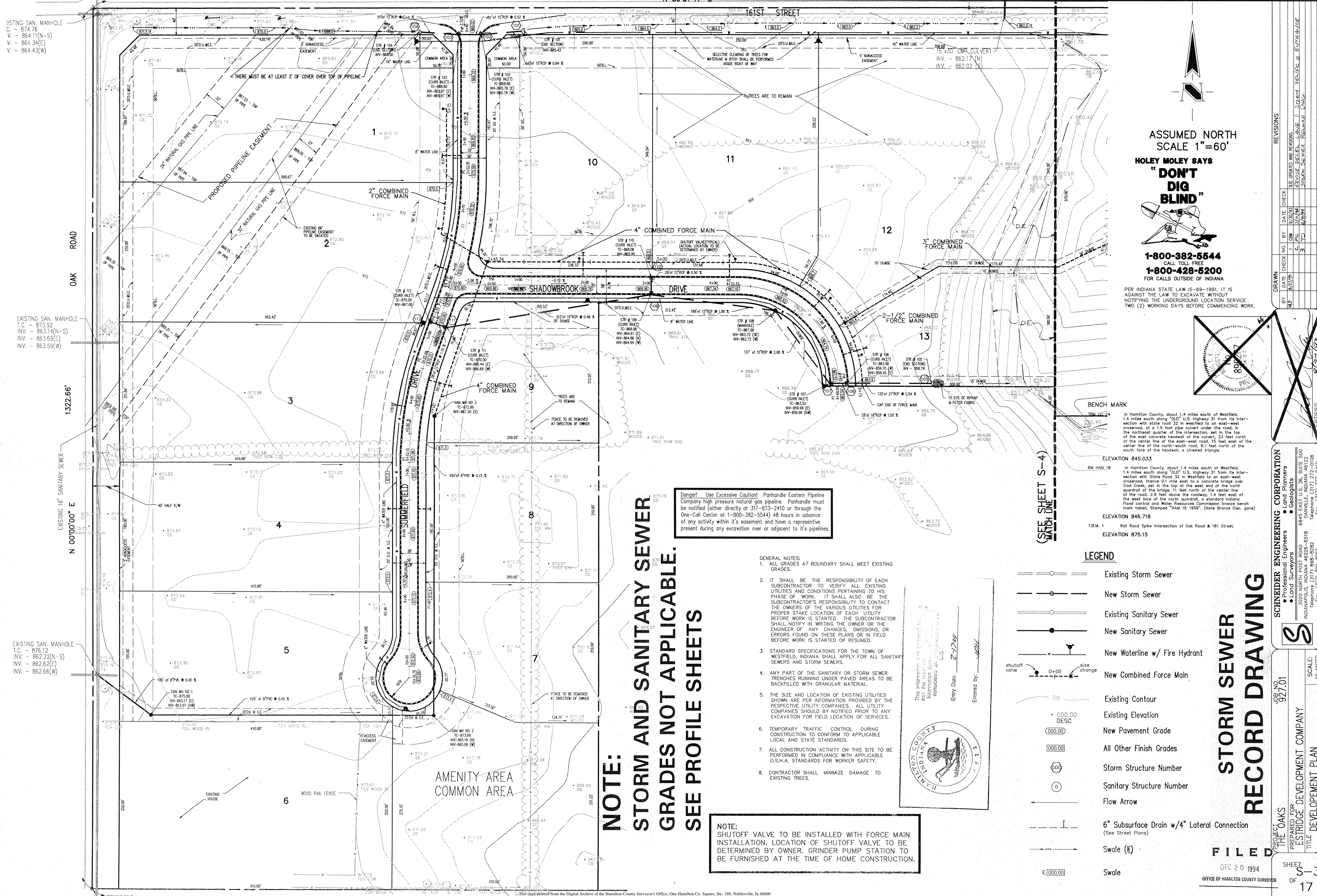


Paul C. Claine
CERTIFIED BY: PAUL C. CLAIN

PROJECT ENGINEER: _____
CHECKED BY: _____ DATE CHECKED: _____

DATE: 8/27/93
SHEET 17 OF 17
FILED
DEC 20 1994
OFFICE OF HAMILTON COUNTY SURVEYOR
(JOB No. 927.01)

STORM SEWER
RECORD DRAWING



EXISTING SAN. MANHOLE
 C. - 874.76
 V. - 864.11(N-S)
 V. - 864.34(E)
 V. - 864.43(W)

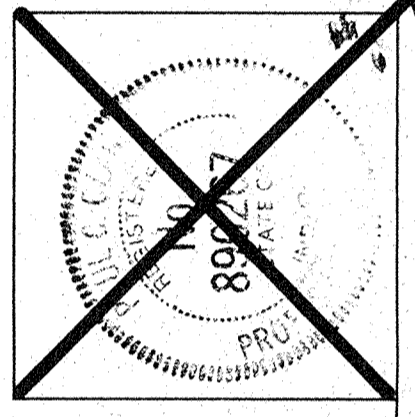
EXISTING SAN. MANHOLE
 T.C. - 873.92
 INV. - 863.14(N-S)
 INV. - 863.69(E)
 INV. - 863.59(W)

EXISTING SAN. MANHOLE
 I.C. - 876.12
 INV. - 862.22(N-S)
 INV. - 862.62(E)
 INV. - 862.66(W)

ASSUMED NORTH
 SCALE 1"=60'
HOLEY MOLEY SAYS
"DON'T DIG BLIND"

1-800-382-5544
 CALL TOLL FREE
1-800-428-8200
 FOR CALLS OUTSIDE OF INDIANA

PER INDIANA STATE LAW IS-69-1991, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.



BENCH MARK
 BM HAN_16
 In Hamilton County, about 1.4 miles south of Westfield, 1.4 miles south along "Old" U.S. Highway 31 from its intersection with State Road 32 in westfield to an east-west crossroad, thence 0.1 mile east to a concrete bridge over Cool Creek, set in the top of the west end of the north quadrant of the bridge, 11 feet north of the center line of the center line of the east-west road, 1.4 feet east of the west face of the north quadrant, a standard Indiana Flood Control and Water Resources Commission bronze bench mark tablet, Stamped "HAM 16 1959". (Note Bronze Disc gone)

ELEVATION 845.033
 BM HAN_16
 In Hamilton County, about 1.4 miles south of Westfield, 1.4 miles south along "Old" U.S. Highway 31 from its intersection with State Road 32 in westfield to an east-west crossroad, thence 0.1 mile east to a concrete bridge over Cool Creek, set in the top of the west end of the north quadrant of the bridge, 11 feet north of the center line of the center line of the east-west road, 1.4 feet east of the west face of the north quadrant, a standard Indiana Flood Control and Water Resources Commission bronze bench mark tablet, Stamped "HAM 16 1959". (Note Bronze Disc gone)

ELEVATION 846.716
 T.B.M. 1 Rail Road Spike Intersection of Oak Road & 161 Street.
ELEVATION 875.15

NOTE:
STORM AND SANITARY SEWER GRADES NOT APPLICABLE. SEE PROFILE SHEETS

DANGER! Use Excessive Caution! Panhandle Eastern Pipeline Company high pressure natural gas pipeline. Panhandle must be notified (either directly at 317-873-2410 or through the One-Call Center at 1-800-382-5544) 48 hours in advance of any activity within its easement and have a representative present during any excavation over or adjacent to its pipelines.

- GENERAL NOTES:**
- ALL GRADES AT BOUNDARY SHALL MEET EXISTING GRADES.
 - IT SHALL BE THE RESPONSIBILITY OF EACH SUBCONTRACTOR TO VERIFY ALL EXISTING UTILITIES AND CONDITIONS PERTAINING TO HIS PHASE OF WORK. IT SHALL ALSO BE THE SUBCONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNERS OF THE VARIOUS UTILITIES FOR PROPER STAKE LOCATION OF EACH UTILITY BEFORE WORK IS STARTED. THE SUBCONTRACTOR SHALL NOTIFY IN WRITING THE OWNER OR THE ENGINEER OF ANY CHANGES, OMISSIONS, OR ERRORS FOUND ON THESE PLANS OR IN FIELD BEFORE WORK IS STARTED OR RESUMED.
 - STANDARD SPECIFICATIONS FOR THE TOWN OF WESTFIELD, INDIANA SHALL APPLY FOR ALL SANITARY SEWERS AND STORM SEWERS.
 - ANY PART OF THE SANITARY OR STORM SEWER TRENCHES RUNNING UNDER PAVED AREAS TO BE BACKFILLED WITH GRANULAR MATERIAL.
 - THE SIZE AND LOCATION OF EXISTING UTILITIES SHOWN ARE PER INFORMATION PROVIDED BY THE RESPECTIVE UTILITY COMPANIES. ALL UTILITY COMPANIES SHOULD BE NOTIFIED PRIOR TO ANY EXCAVATION FOR FIELD LOCATION OF SERVICES.
 - TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL AND STATE STANDARDS.
 - ALL CONSTRUCTION ACTIVITY ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH APPLICABLE O.S.H.A. STANDARDS FOR WORKER SAFETY.
 - CONTRACTOR SHALL MINIMIZE DAMAGE TO EXISTING TREES.

NOTE:
 SHUTOFF VALVE TO BE INSTALLED WITH FORCE MAIN INSTALLATION. LOCATION OF SHUTOFF VALVE TO BE DETERMINED BY OWNER. GRINDER PUMP STATION TO BE FURNISHED AT THE TIME OF HOME CONSTRUCTION.

LEGEND

	Existing Storm Sewer
	New Storm Sewer
	Existing Sanitary Sewer
	New Sanitary Sewer
	New Waterline w/ Fire Hydrant
	New Combined Force Main
	Existing Contour
	Existing Elevation
	New Pavement Grade
	All Other Finish Grades
	Storm Structure Number
	Sanitary Structure Number
	Flow Arrow
	6" Subsurface Drain w/4" Lateral Connection (See Street Plans)
	Swale (R)
	Swale

This information was obtained from the Hamilton County Information System and is considered an official record.

Entry Date: 2/2/99
 Entered by: JDL

REVISIONS

NO.	DATE	CHECKED BY	DESCRIPTION
1	9/20/03	JDM	SIT UPDATES AND REVISIONS
2	1/10/04	JDM	REVISE PER EASEMENT
3	7/19/04	JDM	STORM SEWER REVISIONS

CERTIFIED
 8/27/93

SCHNIDER ENGINEERING CORPORATION
 • Professional Engineers
 • Land Planners
 • Geologists
 3020 NORTH POST ROAD
 INDIANAPOLIS, INDIANA 46226-6518
 Telephone: (317) 898-8282
 Fax: (317) 899-8010

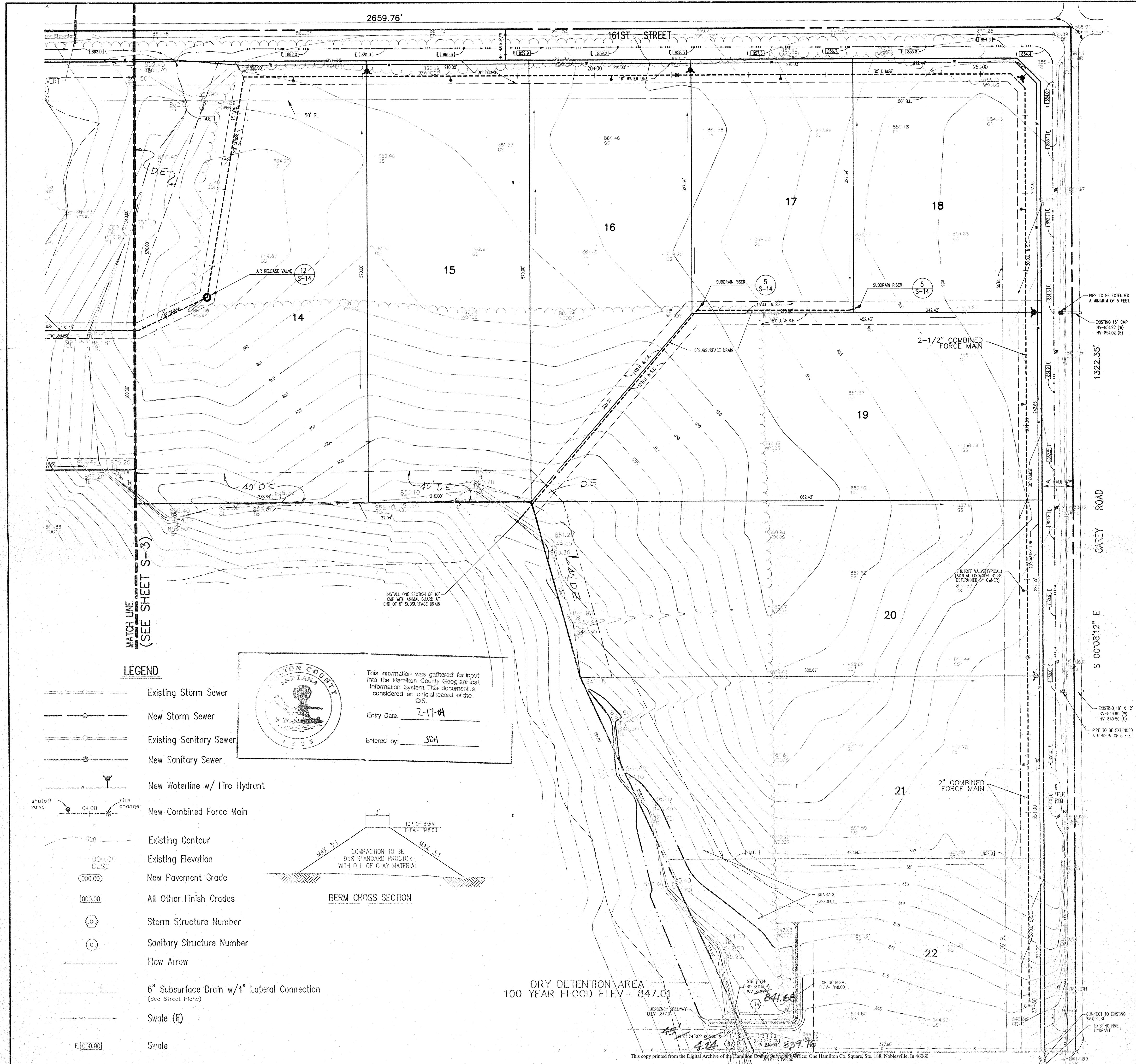
STORM SEWER RECORD DRAWING

JOB NO. 927.01
 PREPARED FOR THE OAKS
 ESTRIDGE DEVELOPMENT COMPANY
 TITLE DEVELOPMENT PLAN

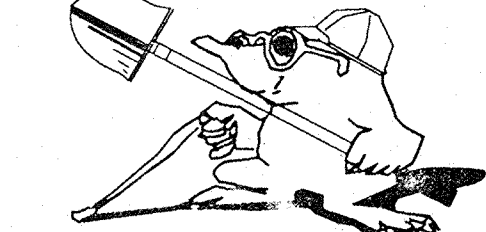
SCALE: AS NOTED

FILED
 DEC 20 1994
 OFFICE OF HAMILTON COUNTY SURVEYOR

SHEET 5-3
 OF 17



**HOLEY MOLEY SAYS
"DON'T
DIG
BLIND"**

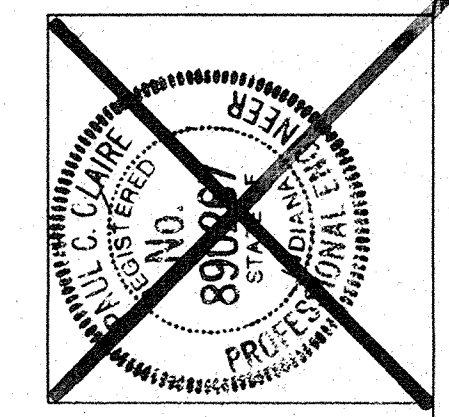


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ASSUMED NORTH
SCALE 1"=60'

PER INDIANA STATE LAW IS-69-1991, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

- GENERAL NOTES:
- ALL GRADES AT BOUNDARY SHALL MEET EXISTING GRADES.
 - IT SHALL BE THE RESPONSIBILITY OF EACH SUBCONTRACTOR TO VERIFY ALL EXISTING UTILITIES AND CONDITIONS PERTAINING TO HIS PHASE OF WORK. IT SHALL ALSO BE THE SUBCONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNERS OF THE VARIOUS UTILITIES FOR PROPER STAKE LOCATION OF EACH UTILITY BEFORE WORK IS STARTED. THE SUBCONTRACTOR SHALL NOTIFY IN WRITING THE OWNER OR THE ENGINEER OF ANY CHANGES, OMISSIONS, OR ERRORS FOUND ON THESE PLANS OR IN FIELD BEFORE WORK IS STARTED OR RESUMED.
 - STANDARD SPECIFICATIONS FOR THE TOWN OF WESTFIELD, INDIANA SHALL APPLY FOR ALL SANITARY SEWERS AND STORM SEWERS.
 - ANY PART OF THE SANITARY OR STORM SEWER TRENCHES RUNNING UNDER PAVED AREAS TO BE BACKFILLED WITH GRANULAR MATERIAL.
 - THE SIZE AND LOCATION OF EXISTING UTILITIES SHOWN ARE PER INFORMATION PROVIDED BY THE RESPECTIVE UTILITY COMPANIES. ALL UTILITY COMPANIES SHOULD BE NOTIFIED PRIOR TO ANY EXCAVATION FOR FIELD LOCATION OF SERVICES.
 - TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL AND STATE STANDARDS.
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 - CONTRACTOR SHALL MINIMIZE DAMAGE TO EXISTING TREES.



REVISIONS	DATE	CHECK	BY
SITE UPDATES AND REVISIONS	9/20/03		
ADDED 6" M SWALE & SPOT GRADES	7/7/94		
	7/3		
	7/2/24		

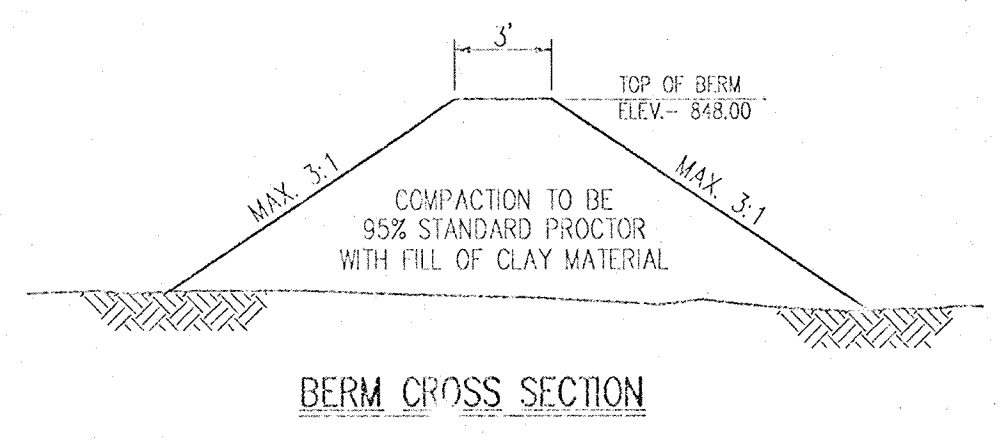
LEGEND

- Existing Storm Sewer
- New Storm Sewer
- Existing Sanitary Sewer
- New Sanitary Sewer
- New Waterline w/ Fire Hydrant
- New Combined Force Main
- Existing Contour
- Existing Elevation
- New Pavement Grade
- All Other Finish Grades
- Storm Structure Number
- Sanitary Structure Number
- Flow Arrow
- 6" Subsurface Drain w/4" Lateral Connection (See Street Plans)
- Swale (H)
- Swale (L)

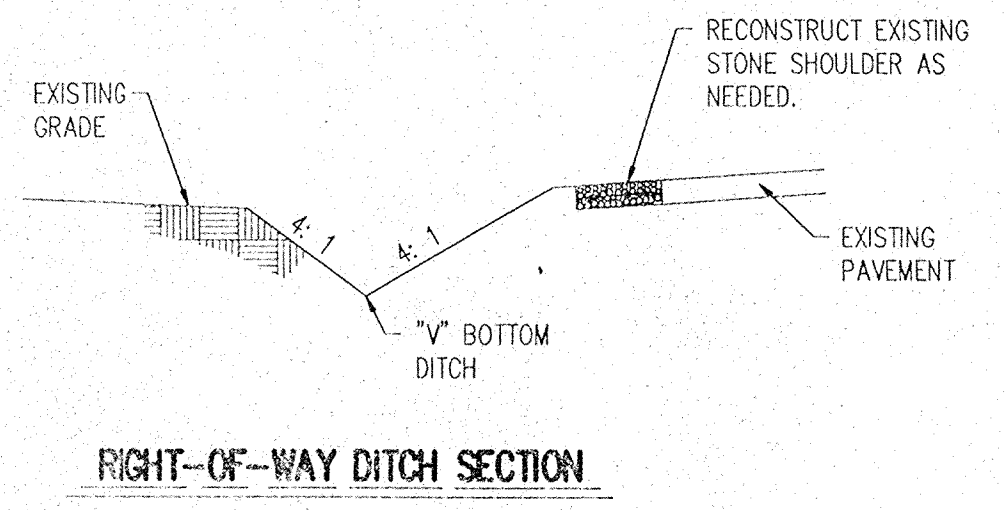
This information was gathered for input into the Hamilton County Geographical Information System. This document is considered an official record of the GIS.

Entry Date: 2-17-04

Entered by: JDH



DRY DETENTION AREA
100 YEAR FLOOD ELEV-- 847.01



- BENCH MARK**
- BM CC 14 In Hamilton County, about 1.4 miles south of Westfield, 1.4 miles south along "OLD" U.S. Highway 31 from its intersection with state road 32 in Westfield to an east-west crossroad, at a 1.5 foot pipe culvert under the road, in the northeast quarter of the intersection, set in the top of the east concrete headwall of the culvert, 23 feet north of the center line of the east-west road, 15 feet east of the center line of the north-south road, 8.1 feet north of the south face of the headwall, a chiseled triangle.
- ELEVATION 845.033
- BM HAN 16 In Hamilton County, about 1.4 miles south of Westfield, 1.4 miles south along "OLD" U.S. Highway 31 from its intersection with State Road 32 in Westfield to an east-west crossroad, thence 0.1 mile east to a concrete bridge over Cool Creek, set in the top at the west end of the north quadrant of the bridge, 11 feet north of the center line of the road, 2.9 feet above the roadway, 1.4 feet east of the west face of the north quadrant, a standard Indiana Flood control and Water Resources Commission bronze bench mark tablet, Stamped "T.M. 16 1959". (Note: Bronze Disc, gone)
- ELEVATION 846.716
- T.R.M. 1 Rail Road Spike Intersection of Oak Road & 161 Street.
- ELEVATION 875.15

NOTE:
SHUTOFF VALVE TO BE INSTALLED WITH FORCE MAIN INSTALLATION. LOCATION OF SHUTOFF VALVE TO BE DETERMINED BY OWNER. GRINDER PUMP STATION TO BE FURNISHED AT THE TIME OF HOME CONSTRUCTION.

RECORD DRAWING

SCHNEIDER ENGINEERING CORPORATION
• Land Planners
• Geologists
• Professional Engineers
• Land Surveyors

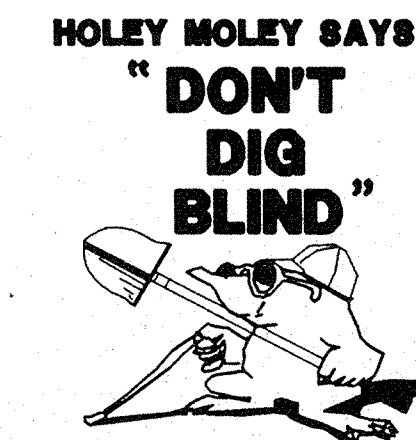
8845 EAST U.S. 31 SUITE 600
INDIANAPOLIS, INDIANA 46226-6518
Telephone (317) 272-0108
Fax (317) 699-8010

JOB NO. 927.01
PREPARED FOR THE OAKS
PESTRIDGE DEVELOPMENT COMPANY
TITLE DEVELOPMENT PLAN
SCALE: AS NOTED

FILED
DEC 20 1994
OFFICE OF HAMILTON COUNTY SURVEYOR

GENERAL NOTES:

1. ALL CUTS ARE TAKEN FROM THE EXISTING GRADE TO THE PIPE INVERT.
2. ALL STATIONING IS TAKEN FROM THE NEAREST DOWNSTREAM STRUCTURE.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL UTILITY LOCATIONS BEFORE CONSTRUCTION BEGINS.
4. TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL AND STATE STANDARDS.
5. ALL CONSTRUCTION ACTIVITY ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH APPLICABLE O.S.H.A. STANDARDS FOR WORKER SAFETY.
6. CONTRACTOR SHALL MINIMIZE DAMAGE TO EXISTING TREES.



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FOR CALLS OUTSIDE OF INDIANA

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BENCH MARK

TBM CC 14
ELEVATION 845.033
In Hamilton County, about 1.4 miles south of Westfield, 1.4 miles south along "OLD" U.S. Highway 31 from its intersection with State Road 32 in westfield to an east-west crossroad, at a 1.5 foot pipe culvert under the road, in the northeast quarter of the intersection, set in the top of the east concrete headwall of the culvert, 23 feet north of the center line of the east-west road, 15 feet east of the center line of the north-south road, 6.1 feet north of the south face of the headwall, a chiseled triangle.

BM HAN 16
ELEVATION 846.716
In Hamilton County, about 1.4 miles south of Westfield, 1.4 miles south along "OLD" U.S. Highway 31 from its intersection with State Road 32 in Westfield to an east-west crossroad, thence 0.1 mile east to a concrete bridge over Cool Creek, set in the top of the west end of the north quadrant of the bridge, 11 feet north of the center line of the road, 2.9 feet above the roadway, 1.4 feet east of the west face of the north quadrant, a standard Indiana Flood Control and Water Resources Commission bronze bench mark tablet, Stamped "HAM 16 1957" (Note Bronze Disc, none).

T.B.M. 1
Rat Road Spike Intersection of Oak Road & 161 Street.
ELEVATION 875.15

This information was gathered for input into the Hamilton County Geographical Information System. This information is considered an "as-recorded" of the GIS.
Entry Date: 2-17-94
Entered by: JPH

SCALE: 1"=50'

DANGER! Use Excessive Caution! Panhandle Eastern Pipeline Company high pressure natural gas pipeline. Panhandle must be notified (either directly at 317-873-2410 or through the One-Call Center at 1-800-382-5544) 48 hours in advance of any activity within its easement and have a representative present during any excavation over or adjacent to its pipelines.

CERTIFICATION FOR "RECORD DRAWING"

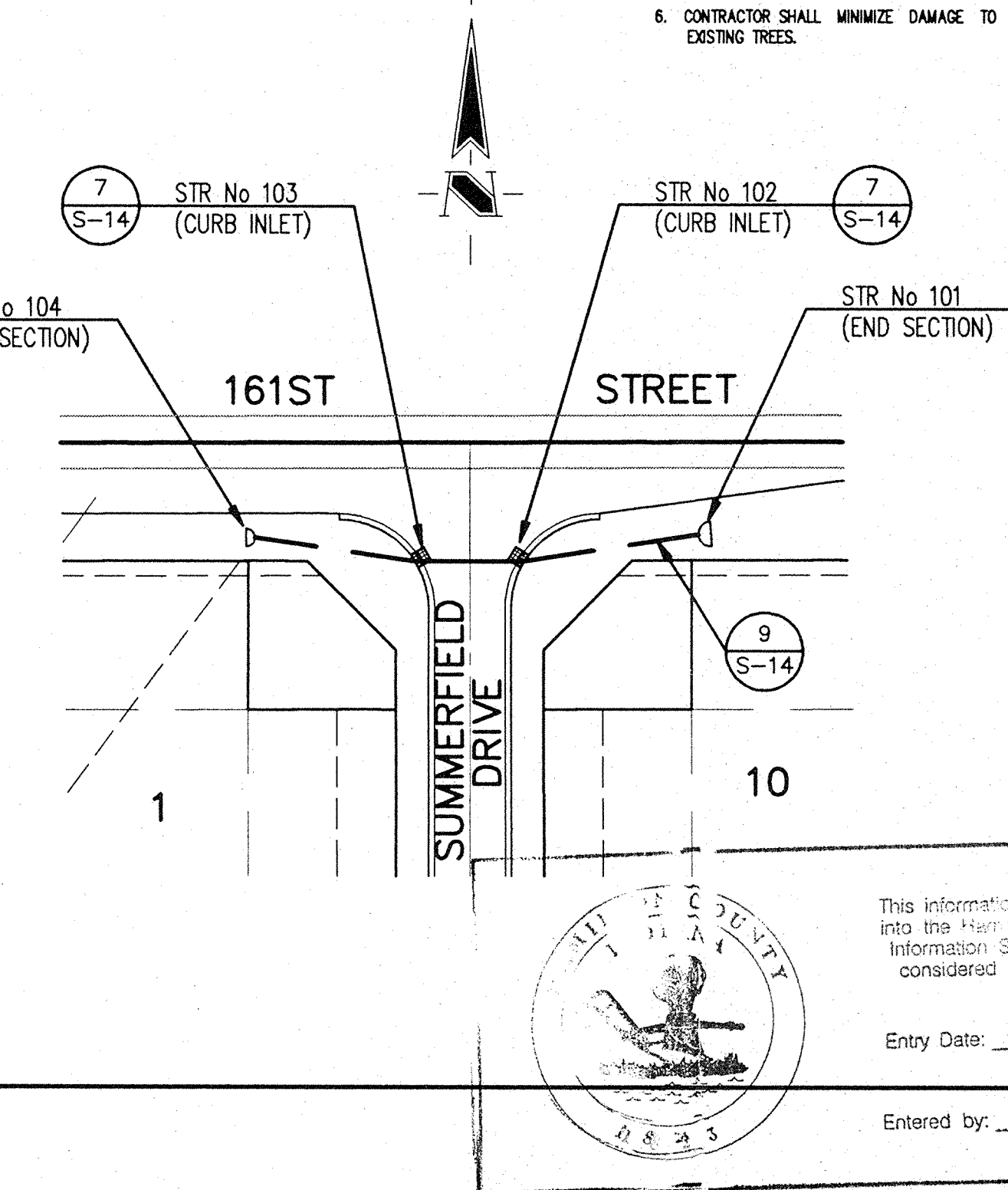
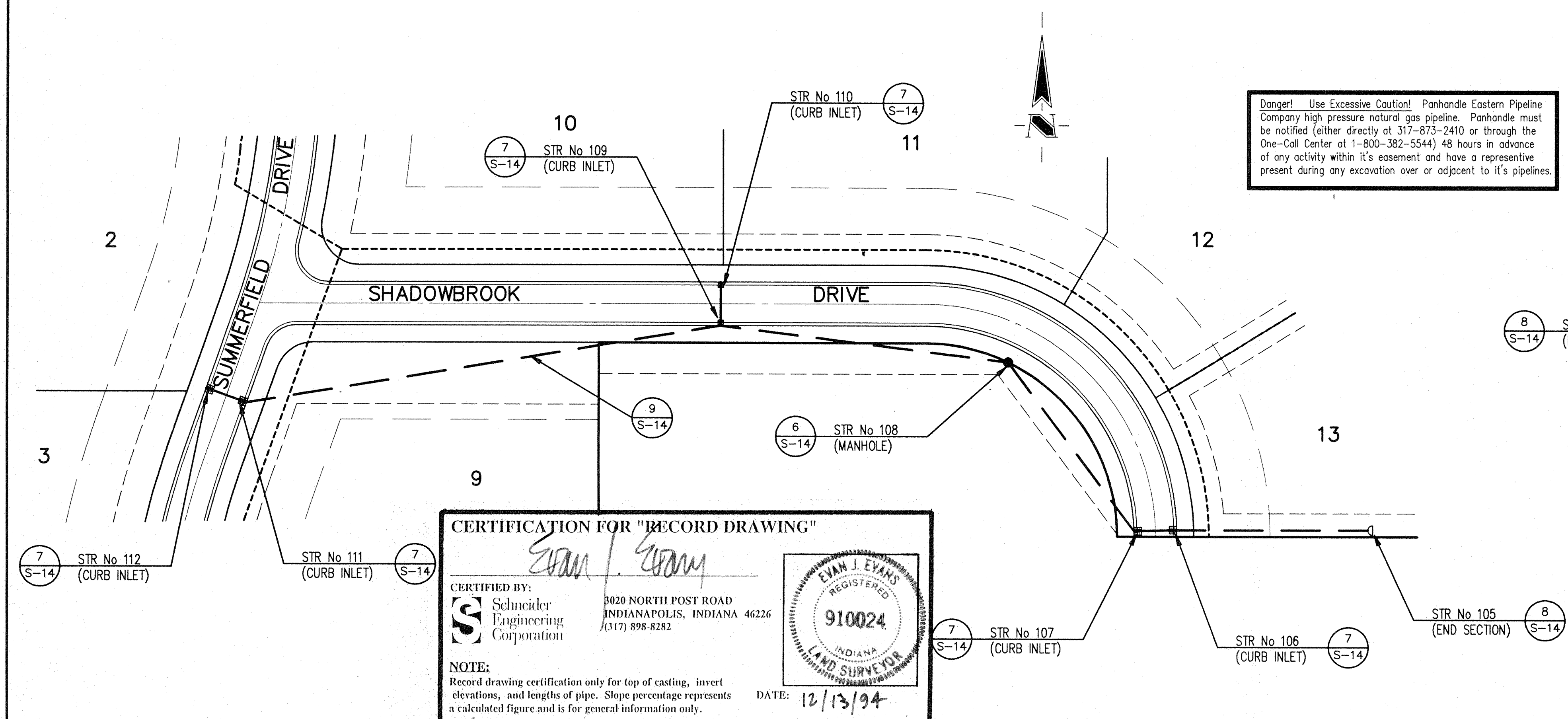
CERTIFIED BY:
S Schneider Engineering Corporation
3020 NORTH POST ROAD
INDIANAPOLIS, INDIANA 46226
(317) 898-8282

DATE: 12/13/94

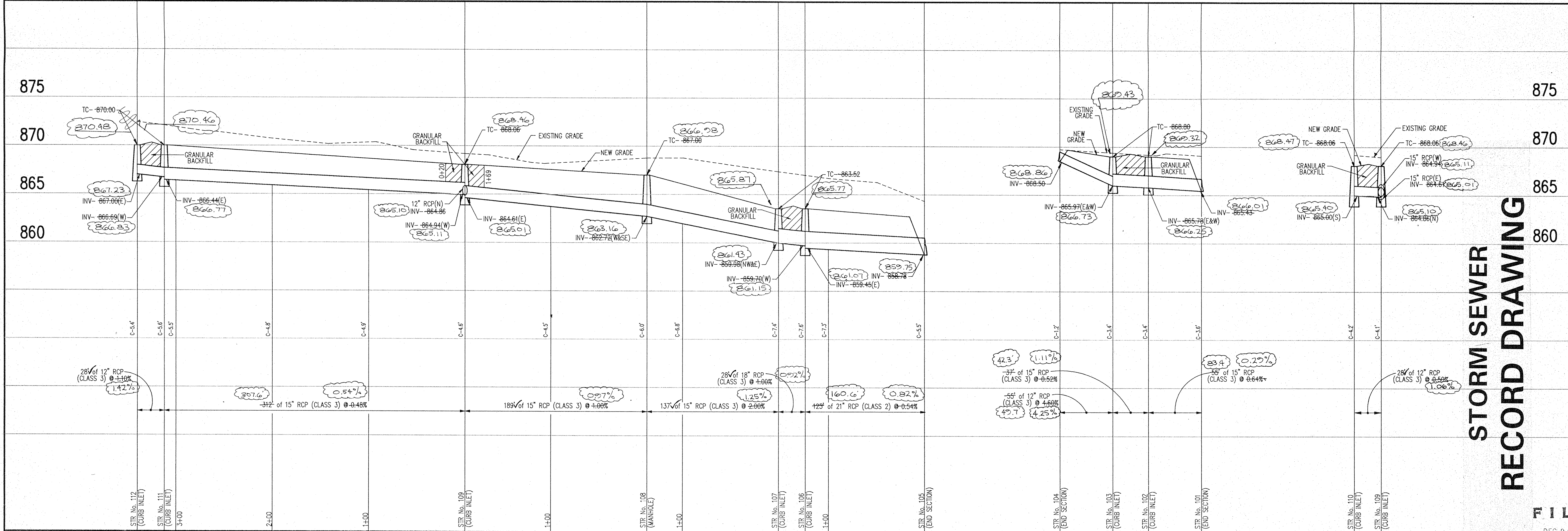
EVAN J. EVANS
REGISTERED
910024
INDIANA
LAND SURVEYOR

NOTE:
Record drawing certification only for top of casting, invert elevations, and lengths of pipe. Slope percentage represents a calculated figure and is for general information only.

STORM SEWER PLAN



STORM SEWER RECORD DRAWING



STORM SEWER PROFILE

SCALE: HORZ.: 1"=50'
VERT.: 1"=5'

PROJECT: THE OAKS
PREPARED FOR: ESTRIDGE DEVELOPMENT COMPANY
TITLE: STORM SEWER PLAN

JOB NO.: 927.01
DATE: 12/13/94

SCHEIDER ENGINEERING CORPORATION
Professional Engineers
Professional Surveyors
Land Planners
Geologists
Land Surveyors

3020 NORTH POST ROAD
DANVILLE, INDIANA 46226
INDIANAPOLIS, INDIANA 46226
PHONE: (317) 898-8282
FAX: (317) 899-8010

FILE NO.: 927.01 SHEET 6-13 OF 17
DATE: DEC 20 1994

EARTHWORK

1. SCOPE OF WORK

A. Extent: The work required under this section consists of all excavating, filling, rough grading and related items necessary to complete the work indicated on the drawings and described in the specifications. The Contractor shall notify in writing the owners and the Engineer of any changes, errors, or omissions found on the plans or in the field, before work is started or resumed.

- 1. In general, the items of work to be performed under this section shall include: clearing and grubbing, removal of trees and stumps (where required), protection of trees to remain, stripping and storage of topsoil, fill compaction and rough grading of entire site.
2. Excavated material that is suitable may be used for fills. All unsuitable material and all surplus excavated material not required shall be removed from the site. The location of dump and length of haul shall be the Contractor's responsibility.

3. Provide and place any additional fill material from off the site as may be necessary to produce the grades required. Fill obtained from off site shall be of kind and quality as specified for fills herein and the source approved by the Owner.

4. The Contractor shall accept the site as he finds it and shall remove all trash, rubbish and debris from the site prior to starting excavation.

B. Work not included: The following items of related work are specified and included in other sections of these specifications:

- 1. Excavation, grading and backfilling for utility lines
2. Storm drainage systems
3. Sanitary sewer systems
4. Streets and paving
5. Water supply system

2. BENCH MARKS

Maintain carefully all bench marks, monuments and other reference points; if disturbed or destroyed, contractor shall contact engineer.

3. REMOVAL OF TREES

A. Remove all trees and stumps from area to be occupied by road and surfaced areas. Removal of trees outside these areas shall only be done as noted on drawings or approved by the Owner.

B. All brush, stumps, wood and other refuse from the trees shall be buried onsite or removed to disposal areas off of the site. Disposal by burning shall not be permitted unless proper permits are obtained (where applicable). The location of on site bury pits shall be designated by the owner or the Engineer.

4. PROTECTION OF TREES

A. General Protection: The Contractor shall be responsible for the protection of tops, trunks and roots of existing trees on the project site that are to remain. Existing trees subject to construction damage shall be boxed, fenced or otherwise protected before any work is started, do not stockpile within branch spread. Remove interfering branches without injury to trunks and cover scars with tree paint.

5. HANDLING OF TOPSOIL

A. Remove all organic material from the areas to be occupied by buildings, roads, walks and parking areas. Pile and store topsoil at a location where it will not interfere with construction operations. Topsoil shall be reasonably free from subsoil, debris, weeds, grass, stones, ect.

B. After completion of site grading and subsurface utility installation, top soil shall be replaced in areas designated on the erosion control plan for seeding and/or sodding. Any remaining top soil shall be used for finished grading around structures and landscaping areas.

6. DISPOSITION OF UTILITIES:

A. Rules and regulations governing the respective utilities shall be observed in executing all work under this section.

B. If active utilities are encountered but not shown on the drawings, the Engineer shall be advised before work is continued.

C. Inactive and abandoned utilities encountered in excavating and grading operations shall be reported to the Engineer. They shall be removed, plugged or capped as directed by the Utility Company or the Engineer.

D. It shall be the responsibility of each contractor to verify all existing utilities and conditions pertaining to his phase of the work. It shall also be the contractors responsibility to contact the owners of the various utilities before work is started.

7. SITE GRADING:

A. Grades: Contractor shall perform all cutting, filling, compacting of fills and rough grading required to bring entire project area to grade as shown on the drawings.

B. Rough Grading: the tolerance for paved areas shall not exceed 0.10 feet plus or minus above the established subgrade. All other areas shall not exceed 0.10 feet plus or minus the established grade. All banks and other breaks in grade shall be rounded at top and bottom.

C. Compaction Requirements:

- 1. All building pad areas shall be compacted to standards specified by local and/or state building codes.
2. For compaction requirements of paved areas, see street specifications.

8. Earth Work Balance

The Contractor shall confirm all earthwork quantities prior to start of construction. If an excess or shortage of earth is encountered, the Contractor shall conform with the Owner and Engineer the requirements for stockpiling, removal or importing of earth.

Minor adjustments to the grades may be required to earthwork balances when minor excess material or shortages are encountered. It is recognized by the parties hereto that the calculations of the Engineer in determining earthwork quantities shall be accomplished in accordance with the American Society of Civil Engineers Standards for such calculations. Further, that these calculations are subject to the interpretations of soil borings as the physical limits of the various soil types, also the allowable variation in finish grade and compaction permitted the contractor, and that all of these parameters may cause either an excess or shortage of actual earthwork materials to complete the project. If such an actual minor excess or shortage of materials occurs, the contractor shall contact the engineer to determine if adjustment can be made to correct the imbalance of earth.

STORM SEWER SYSTEMS

1. SCOPE OF WORK

The work under this section includes all storm sewers, storm water inlets, and related items, including excavation and backfilling, necessary to complete the work shown on the drawings.

2. MATERIALS

A. Storm Sewers

- 1. Reinforced concrete sewer pipe shall conform to ASTM C-76 latest revision, with joints conforming to ASTM C-443 latest revision when storm pipe is continuously submerged in water.

B. Manholes

- 1. Precast reinforced concrete manhole sections and steps shall conform to ASTM C-478 latest revision.
2. Casting shall be of uniform quality, free from blow holes, porosity, hard spots, shrinkage distortion or other defects. They shall be smooth and well cleaned by shot-blasting or by some other approved method. They shall be coated with asphalt paint which shall result in a smooth coating, tough and tenacious when cold, not tacky or brittle. They shall be gray iron meeting ASTM A-48 latest revision.
3. Joints - Manhole sections shall be jointed with rubber type gaskets. The rubber type gaskets shall meet ASTM C-443 latest revision. When manhole and storm pipe are continuously in water.

C. SUBDRAINS

- 1. Perforated plastic pipe subdrains shall conform to ASTM F-405, AASHTO M-252. (4" to 10" pipe)

3. APPLICATION

A. Permits and Codes - The intent of this section of the specifications is that the contractor's bid on the work covered herein shall be based upon the drawings and specifications but that the work shall comply with all applicable codes and regulations as amended by any waivers. Contractor shall furnish all bonds necessary to get permits for cuts and connections to existing sewers.

B. Local Standards - the term "Local Standards" as used herein means the standards of design and construction of the respective municipal department or utility company.

C. Existing Improvements - Maintain in operating condition all active utilities, sewers and other drains encountered in the sewer installation. Repair to the satisfaction of the owner any damage to existing active improvements.

D. Workmanship - To conform to all local, state and national codes and to be approved by all local and state agencies having jurisdiction.

E. Trenching - Lay all pipe in open trenches, except when the local authority gives written permission for tunneling. Open the trench sufficient ahead of pipelaying to reveal any obstructions. The width of the trench shall be the inside pipe diameter plus 24 inches for 12 inches above the pipe. Sheet and brace trench as necessary to protect workmen and adjacent structures. All trenching to comply with Occupational Safety and Health Administration Standards. Keep trenches free from water while construction is in progress. Under no circumstances lay pipe or appurtenances in standing water. Conduct the discharge from trench dewatering to drains or natural drainage channels.

F. Special Supports - Whenever in the opinion of the Engineer the soil at or below the pipe grade is unsuitable for supporting sewers and appurtenances specified in this section, such special support, in addition to those shown or specified, shall be provided as the Engineer may direct, and the contract will be adjusted.

G. Backfilling - for a depth of at least 12 inches above the top of the pipe, backfill with earth or granular material free from large stones, rock fragments, roots or sod. Tamp this backfill thoroughly, taking care not to disturb the pipe. For the remaining trench depth, backfill with earth or granular material containing stones or rocks not larger than 4 inches. Backfill under and within 5' of walks, parking areas, driveways and street shall be granular material only - thoroughly compacted by approved methods.

H. Manhole Inverts - Construct manhole flow channels of concrete sewer pipe or brick, smoothly finished and of semi-circular section conforming to the inside diameter of the connecting sewers. Make changes in size or grade gradually and changes in direction by true curves. Provide such channels for all connecting sewers at each manhole.

I. Subdrains - All subdrains shall be of the size shown on the plans and shall be constructed to the grades shown. All drains constructed off-site as part of the outlet drain will be located as shown.

J. Utilities - It shall be the responsibility of each contractor to verify all existing utilities and conditions pertaining to his phase of the work. It shall also be the contractors responsibility to contact the owners of the various utilities before work is started. The contractor shall notify in writing the owners or the engineer of any changes, errors or omissions found on these plans or in the field before work is started or resumed.

STREETS

1. SCOPE OF WORK

The work required under this section includes all concrete and bituminous paving and related items necessary to complete the work indicated on drawings and described in the specifications, including but not limited to:

- All streets, parking areas in contract limits
Curbs and gutters
Sidewalks and concrete slabs, exterior steps

2. MATERIALS

A. Concrete - Concrete shall be ready-mixed concrete and shall be a mix of proportioned fine and coarse aggregates with Portland cement and water. Minimum cement content shall be 6 bags per cubic yard of concrete and maximum water content shall be 5.5 U.S. gallons per sack of cement, including moisture in the aggregate. Slump for normal weight concrete shall be a maximum of 4 inches and a minimum of 2 inches. The slump of machine placed concrete shall be no less than 1-1/4 inches nor more than 3 inches. Standard test ASTM C-143 shall be used to measure slump. Compressive strength of concrete at 28 days shall be 4000 psi. All exterior concrete shall have air entrainment of 5% to 8% by volume per ASTM C-260. Retempering of delivered concrete will not be allowed. Concrete shall be composed of:

- 1. Portland cement - Conforming to ASTM C-150, Type IA or Type IIIA.
2. Aggregates: Conforming to ASTM C-33
3. Water - Shall be clear and free from injurious amounts of oils, acids, alkalis, organic materials or other deleterious substances.

B. Welded Steel Wire Fabric - Where required for concrete reinforcement shall conform to ASTM A185.

C. Premolded Joint Filler - Shall be of non-extruding type meeting ASTM D-544 except that premolded joint filler used in concrete walk construction may be either non-extruding or resilient.

D. Bituminous Pavement Materials - All materials proposed for the construction of bituminous pavements shall comply with the Indiana Department of Transportation specifications, per latest revision.

E. Compacted Aggregate Subbase: Shall be crushed stone or gravel. Crushed gravel shall be minimum of 35% crushed material. Chert shall be limited to a maximum of 8% of the total. Material shall be free from an excess of flat, elongated, thinly laminated, soft or disintegrated pieces, and shall be free from fragments coated with dirt. Compacted aggregate shall be graded as follows:

Table with 2 columns: SIEVE SIZE and % PASSING. Rows include 1-1/2", 1", 3/4", 1/2", #4, #8, #30, #200.

3. APPLICATION

A. Grading - Do any necessary grading in addition to that performed in accordance with Earthwork Section, to bring subgrades, after final compaction, to the required grades and sections for site improvement.

B. Preparation of Subgrade - Remove spongy and otherwise unsuitable material and replace with stable material. No traffic will be allowed on prepared subgrade prior to paving.

C. Compaction of Subgrade - The first 6 inches below the subgrade shall be compacted to at least 100% of the maximum dry density as determined by the provisions of AASHTO T-99. Water shall be prevented from standing on the compacted subgrade.

D. Utility Structures - Check for correct elevation of all manhole covers, valve boxes and similar structures located within areas to be paved, and make, or have made, any necessary adjustments in such structures.

E. Placing Concrete

1. Subgrade - Place concrete only on a moist, compacted subgrade or base free from loose material. Place no concrete on a muddy or frozen subgrade.

2. Forms - All forms shall be free from warp, tight enough to prevent leakage and substantial enough to maintain their shape and position without springing or settling, when concrete is placed. Forms shall be clean and smooth immediately before concreting.

3. Placing Concrete - Concrete shall be deposited so as to require as little rehandling as practicable. When concrete is to be placed at an atmospheric temperature of 35 degrees F. or less, paragraph 702.10 of the Indiana Department of Transportation Specifications latest revision shall be followed.

F. Concrete Curb

- 1. Expansion Joints - Shall be 1/2 inch thick premoiled at ends of all returns and at a maximum spacing of 100 feet.
2. Contraction Joints - Unless otherwise provided, contraction joints shall be sawed joints spaced 20 feet on center.
3. Finish - Tamp and screed concrete as soon as placed, and fill any honey combed places. Finish square corners to 1/4" radius and other corners to radii shown.

G. Concrete Walks and Exterior Steps

- 1. Slopes - Provide 1/4 inch per foot cross slope. Make adjustments in slopes at walk intersections as necessary to provide proper drainage.
2. Dimensions - Walks and steps shall be one course construction and of widths and details shown on the drawings.

3. Finish - Screed concrete and trowel with a steel trowel to a hard dense surface after surface water has disappeared. Apply medium broom finish and scribe control joints at 5 foot spacing. Provide 1/2" expansion joints where sidewalks intersect, and at a maximum spacing of 48 feet between expansion joints.

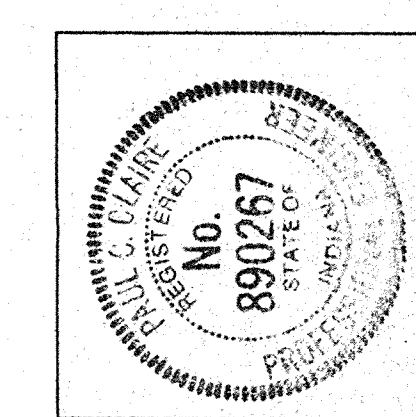
H. Curing Concrete - Except as otherwise specified, cure all concrete by one of the methods described in Section 501.17 of the Indiana Department of Transportation Specifications, latest revision.

I. Bituminous Pavement - Hot asphalt concrete pavement shall be as specified in Section 403 of the Indiana Department of Transportation Specifications latest revisions. Paving will not be permitted during unfavorable weather or when the temperature is 40 degrees F. and falling.

J. Compacted Aggregate Subbase - the thickness shown on the drawings is the minimum thickness of the fully compacted subbase. Compaction shall be accomplished by rolling with a smooth wheeled roller weighing 8 to 10 tons. Compact to 90% compaction using Standard Testing Procedures. Along curbs, headers and walls and at all placed not accessible to the roller, the aggregate material shall be tamped with mechanical tampers or with approved hand tampers.

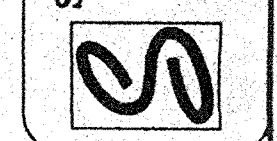
WATERMAIN

1. Watermains are to be laid in accordance with these drawings and specifications provided by Hamilton Western Utilities.



SCHNEIDER ENGINEERING CORPORATION
3020 NORTH POST ROAD
INDIANAPOLIS, INDIANA 46226-9516
Telephone (317) 886-8282 FAX (317) 889-8010
Professional Engineers Land Planners
Land Surveyors Geologists

PROJECT: THE OAKS
JOB NO. 927
PREPARED FOR: ESTRIDGE DEVELOPMENT COMPANY
TITLE: SPECIFICATIONS



SCALE: N/A

FILED
DEC 20 1994
OFFICE OF HAMILTON COUNTY SURVEYOR

SHEET S-17 OF 17
FILE NAME: 927SPEC